Re-evaluation of the Status of *Pelopides mniszechi* (Coleoptera, Passalidae), with a Redescription Based on the Holotype

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Abstract Taxonomic status of the passalid beetle, *Pelopides mniszechi* (KAUP), which was regarded as a junior synonym of *P. tridens* (WIEDEMANN), is reassessed. It is concluded that *P. mniszechi* is a valid species because *P. mniszechi* is specifically distinct from *P. tridens* in the shape of tarsus. *Pelopides mniszechi* is redescribed based on the holotype.

Kaup (1868) described *Eriocnemis mniszechi* from Nias, Sumatra. Afterwards, Heller (1900) gave the replacement name *Gnaphalocnemis* to the passalid genus *Eriocnemis* Kaup, 1868, because the generic name *Eriocnemis* had been preoccupied by the hummingbird genus *Eriocnemis* Reichenbach, 1853. Subsequently, Gravely (1914) regarded the taxon *mniszechi* as a junior synonym of *Gnaphalocnemis tridens* (Wiedemann, 1823) from Java. Furthermore, in his revisional work on the Passalidae of the world, Gravely (1918) regarded the genus *Gnaphalocnemis* as a junior synonym of the genus *Pelopides* Kuwert, 1896.

When we had an opportunity to examine the holotype of *Eriocnemis mniszechi* preserved in the collection of the Hessischer Landesmuseum, Darmstadt, we found it specifically distinct from Javanese specimens of *Pelopides tridens* in some external characters. Thus, we regard the taxon *mniszechi* as a valid species of the genus *Pelopides*. We herewith redescribe *Pelopises mniszechi* based on the holotype for external morphology. In addition, we also describe the male genitalia of *P. mniszechi* based on a specimen from West Sumatra in the first author's collection.

In the following description, we adopt the terminology of GRAVELY (1914) for external morphology and of LINDROTH (1957) for male genitalia. Explanatory SEM photographs are also provided for *Pelopides mniszechi* and *P. tridens* based on specimens

in the first author's collection.

Pelopides mniszechi (KAUP)

(Figs. 1-4)

Eriocnemis mniszechi Kaup, 1868, Coleopt. Hefte, **3**, p. 22.

Gnaphalocnemis tridens (Wiedemann): Gravely, 1914, Mem. Ind. Mus., **3**, p. 250 (in part).

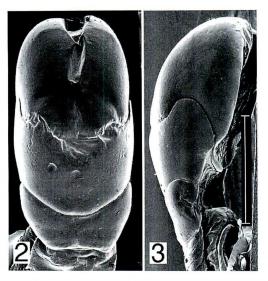
Pelopides tridens (Wiedemann): Gravely, 1918, Mem. Ind. Mus., **7**, p. 95 (in part).

Redescription of the holotype. Sex unknown. Body length from anterior margin of head to apices of elytra 41.0 mm.

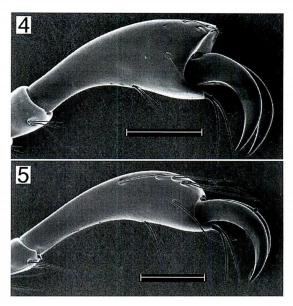
Outer tubercles transversely truncated and weakly bifid at distal end; left outer tubercle narrower and smaller than the right one; outer distal angle of left outer tubercle located at much lower level than the inner one; upper surface of left outer tubercle strongly hollowed in outer portion; right outer tubercle with a distinct secondary tubercle behind outer distal angle; outer angle of right outer tubercle more prominent forwards and located at a slightly lower level than the inner one; inner tubercles large, pointed upwards and forwards; frontal area depressed, rugose; ridge between inner tubercles distinct; central tubercle distinct though small, obtusely angled in lateral view;



Fig. 1. Habitus of Pelopides mniszechi (KAUP), holotype, scale 10 mm.



Figs. 2–3. Male genitalia of *Pelopides mniszechi* (KAUP), not type; 2, ventral view; 3, right lateral view, scale 2 mm.



Figs. 4–5. Fifth tarsomere of hind leg of *Pelopides* spp.; 4, *P. mniszechi* (KAUP), not type; 5, *P. tridens* (WIEDEMANN), not type, scale 1 mm.

parietal ridge rounded; supraoccipital ridge distinct and connected with supraorbital ridge in distal portion, vanished in central portion; depressed area wrinkled; canthus rounded at anterior angle; eye large, extending beyond distal end of canthus. Anterior lower tooth of left mandible located close to lowest terminal tooth, smaller than the latter; upper tooth of left mandible distinct, obtuse-angled; upper margin of left mandible weakly convex behind upper tooth; outer basal angle of left mandible located near base, strongly produced outwards and a little forwards; latero-ventral side of left mandible strongly hollowed near base; anterior lower tooth of right mandible absent; lowest terminal tooth of right mandible much larger than the left one; upper tooth of right mandible pointed forwards; upper margin of right mandible convex behind upper tooth; outer basal angle of right mandible distinct though small. Labrum with setiferous punctures; anterior margin concave, with a distinct denticle at the middle; anterior angles rounded, the left one more prominent forwards than the right one. Antenna with 6 short lamellae. Prementum depressed and rough in central portion, with median ridge in anterior portion, strongly swollen in postero-lateral portion. Mentum with setiferous punctures in lateral portion, impunctate and hairless in central portion; scar obliquely oval; anterior margin almost straight in central portion; posterior margin straight. Hypostomal process impunctate, hairless, smooth; inner margin slightly convex; outer margin with obtuse angle in anterior portion.

Pronotum with distinct median sulcus, rough in lateral scar and in marginal groove. Posterior plate of prosternum impunctate and hairless. Mesosternum impunctate and hairless, with shallow scar; mesothoracic episternum hairy in posterior corner. Lateral and anterior intermediate areas of metasternum densely punctured and hairy; posterior intermediate area impunctate and hairless, with irregular dents along posterior margin of central area; ridge separating intermediate and lateral areas distinct; central area impunctate and hairless.

First to third grooves of elytron simply and finely punctured; fourth simply punctured in anterior portion, ladder-like in posterior portion close to posterior end; fifth to eighth ladder-like along whole length; sixth and seventh wider than fifth and eighth; ninth finely punctured along whole length; sixth to eighth interstriae of elytron thinner than the adjacent grooves in posterior portion. Fifth tarsomere broadened distally, projecting like hood at dorso-distal end in all legs.

Second visible abdominal sternite punctured and hairy along transverse ridge; third to sixth impunctate and hairless.

Description of male genitalia based on a specimen from West Sumatra. Penis large, longer than the sum of parameres and basal piece in ventral view, with longitudinal membranous area along the middle line on ventral side; parameres united on ventral side, with anterior margin concave in ventral view, lateral margins almost parallel in ventral view; basal piece transverse, shorter than parameres in ventral view, with anterior margin concave in ventral view, with lateral margin weakly convex in ventral view.

Specimens examined. Pelopides mniszechi (KAUP): holotype, Nias, Sumatra (in

the collection of Hessischer Landesmuseum, Darmstadt); 1♂, 1♀, Mt. Singglang, West Sumatra, 3–VIII–1994, K. FUJITA leg.

Pelopides tridens (Wiedemann): $1 \, \hat{\sigma}$, Banyuwangi, E. Java, 11-VIII-1986, T. Ito leg.; $1 \, \hat{\varphi}$, Sukanegara, Java, $1,100-1,300 \, \text{m}$, $10\sim 12-VII-2002$, K. Fujita leg.

Distribution. Sumatra.

Notes. Pelopides mniszechi is distinct from *P. tridens* in the following characters: in *P. mniszechi*, the fifth tarsomeres are projecting like a hood at the dorso-distal end in all the legs, whereas in *P. tridens*, they are gently rounded (Figs. 4 & 5); in the former, the eighth groove of the elytron is ladder-like along whole length whereas, in the latter, it is simply punctured in anterior portion.

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要 約

近 雅博・荒谷邦雄:クロツヤムシの一種 Pelopides mniszechiの分類学的再評価と再記載. — Pelopides tridens (WIEDEMANN) の新参異名とみなされていた P. mniszechi (KAUP) の再評価をおこなった。その結果, P. mniszechi (KAUP) は付節の形態が P. tridens とは明確に異なることから、これを有効な種であるとみなし、ホロタイプにもとづき再記載した。

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